

**TRANSLATION**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>F03RL0017</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/JP2004/015894</b>	International filing date (day/month/year) <b>27.10.2004</b>	Priority date (day/month/year) <b>05.11.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>H04B14/06, G10L19/00, H04M3/00</b>		
Applicant <b>OKI ELECTRIC INDUSTRY CO., LTD.</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report																								
Name and mailing address of the IPEA/JP	Authorized officer																								
Facsimile No.	Telephone No.																								

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/015894

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following \_\_\_\_\_ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- nos. \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1.	Statement		
	Novelty (N)	Claims <u>1-9</u>	YES
		Claims _____	NO
	Inventive step (IS)	Claims <u>1-9</u>	YES
		Claims _____	NO
	Industrial applicability (IA)	Claims <u>1-9</u>	YES
		Claims _____	NO
2.	Citations and explanations (Rule 70.7)		
	<p>Document 1: JP 6-334613 A (Kokusai Electric Co., Ltd.), 2 December 1994; fig. 1</p> <p>Document 1 sets forth decoding, wherein frames in which the level has changed suddenly and frames with large numbers of error bits are detected by a controller 10, an erroneous frame flag p is outputted, and when the prediction coefficient holder 15 is assigned an error frame flag p, the average prediction coefficient r of the preceding frame is assigned to the decoder 11.</p> <p>Document 2: JP 58-179037 A (NEC Corporation), 20 October 1983, fig. 5 &amp; US 4554670 A1</p> <p>Document 1 sets forth a decoding signal, wherein a judgment is made as to whether decoding results are the same for each unit of time, and if decoding results are judged to be the same for each unit of time, the output signal is set to zero, and at other times the output signal is set to a decoding signal.</p> <p>Claims 1 to 9</p> <p>None of the documents cited in the international search report indicates or suggests that an adjustment determining means which judges whether amplitude needs to</p>		

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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be adjusted according to amplitude values of a signal waveform which indicates decoding results of generated data stored in a transmission unit signal, is provided to a receiver for receiving signals, which are obtained by, at a transmitting end, quantizing values based on relative differences between a plurality of sample values having temporal before-and-after relationships therebetween, further dividing the data produced in time sequence in accordance with the result of the quantization, and further accommodating the divided data into a predetermined transmission unit signal.

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## Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

(1) It is unclear whether the "decoding results" set forth in claim 1 are "sample values" or "values based on relative differences in sample values".

(2) It is unclear what type of processing the "reverse quantization" set forth in paragraph [0026] represents. For example, if the value "3.14" is quantized to the value "3", information beyond the decimal point is lost, hence it is generally impossible to restore the quantized value "3" to the value of "3.14" before quantization.

(3) The "aforementioned quantization results which indicate the amplitude of the aforementioned signal waveform" in claims 2 to 5 are understood to be the decoding results DC1 which have been subjected to "reverse quantization corresponding to difference quantization in the decoder 11" set forth in paragraph [0026]. It is unclear why values which have been subjected to reverse quantization are referred to as "quantization results".

(4) In the disclosure "whether amplitude adjustment is necessary is judged based on these comparison results" set forth in claim 2, it is unclear for what type of comparison results amplitude adjustment is required.

(5) In the disclosure "whether amplitude adjustment is necessary is judged based on these three comparison results" set forth in claim 3, it is unclear for what type of comparison results amplitude adjustment is

## Box No. VIII Certain observations on the international application

required.

(6) In the disclosure "whether amplitude adjustment is necessary is judged based on these comparison results" set forth in claim 4, it is unclear for what type of comparison results amplitude adjustment is required.

(7) In the disclosure "whether amplitude adjustment is necessary is judged according to the comparison " set forth in claim 5, it is unclear for what type of comparison results amplitude adjustment is required.

(8) The wording "for example, if the occurrence of a transmission error for a particular packet (frame) is detected, an opportunity for the adjuster (12, 81) to function may be assigned" in paragraph [0132] judges whether or not adjustment is required before decoding, therefore the wording "whether or not amplitude adjustment is necessary is judged according to the values for amplitude for a signal waveform which indicate the decoding results for produced data accommodated in the aforementioned transmission unit signal" in claim 1 is inconsistent.